

# MANUFACTURING EXTENSION PARTNERSHIP

## Success Stories from the Field

### GNT Enterprises of Louisiana, LLC

#### Manufacturing Extension Partnership of Louisiana

#### As Hurricane Season Nears, GNT Enterprises Prepares for Record Sales

##### Client Profile:

GNT Enterprises, located in Maurice, Louisiana was formed in 2005 in the wake of Hurricanes Katrina and Rita. The sole product of GNT is Storm Clamps, a permanently installed device made of glass filled nylon plastic. Storm Clamps are used to secure plywood over window or door openings, for protection during major weather events. The family-owned company employs 3 people and has a regional customer base along the Gulf Coast.

##### Situation:

Multiple issues arose from GNT's initial design of the Storm Clamp. It was made with aluminum, which made the product expensive to manufacture. Secondly, they could only be used on recessed window openings, which owner Guy Thompson realized would limit the potential customer base. Thompson said, "I knew that for the Storm Clamp to be successful it had to have three elements: first; it had to work--it had to secure plywood against hurricane force winds; second, it had to be of a manufacturing process that made it affordable; and, third, it had to be aesthetically appealing if people were going to buy it and install it on their homes." Thompson contacted the Manufacturing Extension Partnership of Louisiana (MEPOL), a NIST MEP network affiliate, for assistance with the design modifications.

##### Solution:

MEPOL procured funding through both the Small and Emerging Business Development program of Louisiana Economic Development and the U.S. Department of Agriculture-Rural Development program to assist GNT with their new product development efforts. Since the initial meeting with MEPOL, the Storm Clamp has been through numerous design modifications, including switching the construction material from aluminum, to stainless steel, to plastic, modifying the clamp to work with both recessed and non-recessed windows, and designing it to be permanently installed onto structures. Because of this permanent installation, the user does not have to use nails or screws to secure plywood onto decorative shutters or window frames each time a hurricane threatens. This saves precious time before the storm for other preparations that need to be made. Working prototypes were made throughout this process using MEPOL's FDM (fused deposition modeling) Rapid Prototyping services. To address the aesthetics, the design was slim-lined and is manufactured in four typical exterior home colors. Storm Clamps can also be custom painted for an exact match. With the design phase complete, MEPOL assisted Thompson with identifying a patent attorney to perform patent research and file for a provisional patent, which has been granted. MEPOL also connected Thompson to eBell Design, a local branding and advertising firm, to create marketing materials for the company including the Storm Clamps' logo, business card design, product packaging, trifold brochure, and a website offering on-line purchasing.

##### Results:

[www.mep.nist.gov](http://www.mep.nist.gov)



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### Success Stories from the Field

- \* Increased sales by \$43,000.
- \* Realized \$34,000 in cost savings.
- \* Invested \$71,000 in the company.
- \* Created 3 new jobs.

#### **Testimonial:**

"MEPOL has been a good source of information for us. From search engine optimization, to patent assistance, to marketing, we've benefitted from their expertise."

Guy Thompson, Owner